APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,623	02/25/2002	Kouichi Yasaki	1466.1055	8101

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER
DENNISON, JERRY B

ART UNIT	PAPER NUMBER
2143	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/080,623	Applicant(s) YASAKI ET AL.
	Examiner J. Bret Dennison	Art Unit 2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _25 February 2005_.
2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-11_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-11_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☒ All   b)☐ Some * c)☐ None of:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____.
   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _25 February 2002_.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

1.   This Action is in response to Application Number 10/080,623 received on 25

February 2002.

2.   Claims 1-11 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

3.   Claims 1, 7, and 8 recite the limitation, or one similar to it, "reception data for the

latest predetermined quantity in each communication line". It is unclear to Examiner

what this means, (what quantity?). There is also insufficient antecedent basis for the

limitation in the claim.

4.   Claims 1, 7, and 8 recite the limitation, or one similar to it, "receiving a request to

switch the line and the address". There is insufficient antecedent basis for this limitation

("the line" and "the address") in the claim.

5.   Claims 1 and 8 recite the limitation, or one similar to it, "corresponding to data that are already received by the terminal transmitted by the terminal". It is unclear to Examiner what this limitation means.

6.   Claims 1, 7, and 8 recite the limitation, or one similar to it, "corresponding to data that are already received by the server". It is unclear to Examiner what this data is.

7.   Claims 1 and 8 recite the limitation, or one similar to it, "corresponding to the communication line before the switching to the communication line after the switching." It is unclear to Examiner what this limitation means.

8.   Claim 7 recites the limitation, or one similar to it, "corresponding to data that are already received by the terminal to the server". It is unclear to Examiner what this data is.

9.   Claim 2 recites the limitation, "allocates the communication line that has become free by the switching process to the terminal that transmitted the request to switch the line". There is insufficient antecedent basis for the limitation in the claim.

10.   Claims 7 and 8 recite the limitation, or one similar to it, "detecting mating or unmating of a communication cable." It is unclear to Examiner what this limitation

means. Examiner was not able to find the meaning of this limitation in the specification,

other than simply reciting the limitation.

11.   Claim 7 recites the limitation, "the communication line" on line 28. There is

insufficient antecedent basis for the limitation in the claim.

12.   Claims 7 and 8 recite the limitation, "synchronizing the buffer of the terminal with

the server side." It is unclear to Examiner what is being synchronized and how this

synchronization takes place. It is unclear what "the server side" means. There is

insufficient antecedent basis for the limitation in the claim.

13.   Claim 4 recites the limitation, "the application of the fact". There is insufficient

antecedent basis for the limitation in the claim.

14.   Claim 5 recites the limitation, "the terminals". There is insufficient antecedent

basis for the limitation in the claim.

15.   Claim 5 recites the limitation, "and traffics thereof". It is unclear to Examiner what

this limitation means.

16.   Claim 5 recites the limitation, "wherein the line selecting portion selects an appropriate communication line". It is unclear to Examiner what is considered "appropriate".

17.   Claim 6 recites the limitation, "issues a line switching instruction to terminals except one that transmitted the request". It is unclear to Examiner what this limitation means.

18.   Claim 6 recites the limitation, "the line". There is insufficient antecedent basis for the limitation in the claim.

19.   Claim 6 recites the limitation, "an allocates the communication line that has become free by the switching process to the terminal that transmitted the request to switch the line." It is unclear to Examiner what this limitation means. There is insufficient antecedent basis for the limitation ("the communication line") in the claim.

20.   Claim 9 recites the limitation, "comprises a line management portion for memorizing a variation of a communication speed due to switching of a communication line in the past". It is unclear to Examiner what this limitation means.

21.   Claim 10 recites the limitation, "while a second communication line except the first communication". It is unclear to Examiner what this limitation means.

22.   Claim 11 recites the limitations, "the communication line". There is insufficient

antecedent basis for the limitation in the claim.

Examiner Remarks

23.   Before a detailed mapping, Examiner would like to point out that the multiple 112

issues, as shown above, cause ambiguities which make it difficult to provide a detailed

search and consideration of the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bouke (European Patent Application EP 0 987 866) in view of obviousness.

24.   Regarding claims 1, 7, and 8, Bouke disclosed a server of a local area network in

which the server is connected to a terminal via a communication line selected from

plural communication lines, the server comprising:

a buffer for cumulating transmission or reception data for the latest

predetermined quantity in each communication line; and

a switch processing portion for performing a switching process of the plural

communication lines, including

a switch request receiving portion for receiving a request to switch the line

and the address in the buffer corresponding to data that are already received by

the terminal transmitted by the terminal.

a line selecting portion for selecting an appropriate communication line in

response to the request to switch the line, and

a switch instruction transmitting portion for transmitting an instruction of

switching to the selected communication line and the address in the buffer

corresponding to data that are already received by the server (Bouke,

paragraphs 1, 2, 5, 8-11, 14, 19, 25, Bouke disclosed a client and server

establishing a data connection with a special requirement for the transmission of

a special data element, by means of a second address defined by the client,

where buffers are provided in the data network. Bouke also disclosed that

specially designed data networks, telephone networks and radio or satellite links

can be used alongside each other).

Bouke does not explicitly state having a data destination switching portion for

transferring packet data received for the terminal corresponding to the communication

line before the switching to the communication line after the switching.

However, it would have been obvious for one in the ordinary skill in the art to

switch communication lines to transmit data in the teachings of Bouke because Bouke

has the capability to create new data connections between client and server for

transmitting data elements that have special requirements, and also because Bouke

teaches different forms of communication working alongside each other (Bouke, pg 6,

paragraph 10). Therefore it would have been obvious to switch communication lines in

Bouke in order to handle client requests for data elements having special requirements

for transmission.

Claims 7 and 8 include the same limitations as claim 1, and further include the

client end of communication with the same limitations on the handling end. It would

have been obvious to one in the ordinary skill in the art at the time of the invention to

include the client end of the system, setting up the data communication line with the

special requirements in order for client and server to be able to communication and

transmit the data element having special requirements.

25.   Regarding claims 2, 3 and 9, Bouke disclosed the limitations, substantially as

claimed, as described in claims 1 and 8. Bouke does not explicitly state a line

performance measuring portion for measuring performance of each of the plural

communication lines including a communication speed, wherein the line selecting

portion selects an appropriate communication line in accordance with measurement

result of the line performance measuring portion.

However, Bouke did disclose selecting communication lines based on special

requirements, including bandwidth (Bouke, page 2, paragraph 2). See motivation

above.

26.   Regarding claim 5, Bouke disclosed the limitations, substantially as claimed, as

described in claim 1, including a line management portion for detecting communication

lines that each of the terminals uses for connecting to the server and traffics thereof,

wherein the line selecting portion selects an appropriate communication line in

accordance with detection result of the line management portion (Bouke, page 2,

paragraphs 3 and 9). See motivation above.

27.   Regarding claims 6 and 10, Bouke disclosed the limitations, substantially as

claimed, as described in claim 5. Bouke also disclosed creating a new data

communication line between client and server to handle special requirements (Bouke,

page 2, paragraphs 3 and 9). See motivation above.

        Bouke does not explicitly state wherein the switch processing portion issues a

line switching instruction to terminals except one that transmitted the request to switch

the line in accordance with the detection result of the line management portion so as to

perform a switching process of the communication line, and allocates the

communication line that has become free by the switching process to the terminal that

transmitted the request to switch the line.

        However, because the teachings of Bouke disclosed the server creating a new

data communication line for the client that transmitted the request, it would have been

obvious to one in the ordinary skill in the art that creating this new communication line

and using it requires switching to the line. See motivation above.

28.   Regarding claim 11, Bouke disclosed the limitations, substantially as claimed, as

described in claim 8, including wherein the request to switch the line transmitted from

the terminal includes a candidate of the communication line to be used after the

switching, and the line selecting portion in the switch processing portion of the server

selects the communication line included in the request to switch the line from the

terminal as an appropriate communication line (Bouke, page 2, paragraphs 3 and 9,

Bouke disclosed that the data connection is based on the request). See motivation

above.

        Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bouke in

view of Varma et al. (U.S. Patent Number 6,275,497).

29.   Regarding claim 4, Bouke disclosed the limitations, substantially as claimed, as

described in claim 1. Bouke does not explicitly state further comprising a terminal

operation state monitoring portion for monitoring an operation state of the terminal,

wherein the terminal operation state monitoring portion transmits a predetermined

instruction to the terminal and If there is no response from the terminal in a

predetermined period, the terminal operation state monitoring portion informs the

application of the fact.

        In an analogous art, Varma disclosed a controller that changes the operating

protocol of multiple upstream channels according to user status (Varma, see Abstract)

via polling (Varma, col. 2, lines 30-55).

Therefore it would have been obvious to one in the ordinary skill in the art at the time of the invention to incoporporate the teachings of Varma into Bouke for the benefit of establishing high bandwidth channels for the transmission of data to improve performance (Varma, col. 1, lines 20-30).

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (571) 272-3910. The examiner can normally be reached on M-F 8:30am-5pm.
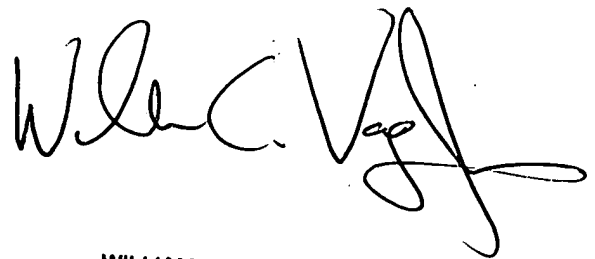
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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Business Center (EBC) at 866-217-9197 (toll-free).

J. B. D.
Patent Examiner
Art Unit 2143

WILLIAM C. VAUGHN, JR.
PRIMARY EXAMINER